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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,019	08/10/2006	Mitsunori Tanaka	1248-0688PUS1	4188
2292 7590 02/03/2011 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER NGUYEN, MICHAEL				
ART UNIT 2617		PAPER NUMBER		
NOTIFICATION DATE 02/03/2011		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/589,019

Applicant(s)

TANAKA, MITSUNORI

Examiner

MICHAEL NGUYEN

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 1-17 and 21-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed on 12/28/2010 includes claims 1-31. Claims 18-20 are pending. Claim 18 are amended. Claim 1-17 and 21-31 are withdrawn.
2. The amendment OVERCOMES the following rejections/rejections:
 - a. Objection of claim 18-20.

Claim Objections

3. Claims 19 and 20 are objected to because of the following informalities: Claim 19 recites "designation signal", where if depend on 18, then this 'designation signal' should be the first designation signal. Claim 20 recites "designation signal", where if depend on 18, then this 'designation signal' should be the second designation signal.
4. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toru (Japan Pub. No. 11-341034, the submitted prior art translation) in view of Malmgren (US. Pat. No. 660912).

Regarding claim 1, Toru teaches a wireless communications system (Title and Abstract), comprising:

a **transmitting device** (par. 0013-0018, 0058-0063; Drawing 1 label 1) including, a plurality of data transmission antennas (i.e. multi-sector antenna, Abstract, par. 0019-00200, 035-0036 where multi-sector antenna contain 4 transceivers where each transceiver is an antenna; Drawing 1 label 11),

reception means, for the transmitting device, receiving a first external signal for plurality of data transmission antennas for use in data transmission (par. 0036-0037 where signal is received and antennas is switched), and

transmission means transmitting data using the data transmission antenna designated by the first external signal (par. 0013-0019, 0058 where antenna is use for data transmission); and

a **receiving device** (par. 0013-0018, 0058-0063; Drawing 1 label 2) including, a plurality of data reception antennas (i.e. multi-sector antenna, Abstract, par. 0019-0020, 0035-0036 where multi-sector antenna contain 4 transceivers where each transceiver is an antenna; Drawing 1 label 21),

reception means, for the receiving device, receiving a second external signal for plurality of data reception antennas for use in data reception (par. 0036-0037 where signal is received and antennas is switched), and

receiving means receiving the data from the transmission means of the transmitting device using the data reception antenna designated by the second external signal (par. 0036-0037; Drawing 1 where 11 transmit signal to 21).

Toru express that the receiver and transmitter measure the BER of the signal and determine the switch of the antenna to meet quality threshold. However, Toru does not expressly teach designation signal.

In an analogous art, Malmgren teaches radio communication system (Abstract) where a remote device (Fig. 2 label MT) base on BER observe (column 3 lines 6-24; Fig. 2 label 210), transmit a designation signal, in the form of request, to another device (Fig. 2 label BS) to request which antenna or sector is use (column 3 lines 25-52; Fig. 2 where MT send signal 215 to BS.).

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to modify Toru to include a remote device to transmit a designation signal or request to another device to designate which antenna to be use as taught by Malmgree in order to improve the capacity of the wireless system by using the designation signal instead of using the data collected since the best antenna to use is selected or request by an entity that actually measure the signal at the location of the device or near the location of the device.

Regarding claim 19, Toru and Malmgree as a whole teach a remote control device transmitting the first designation signal to the reception means for the transmitting device (Toru- Drawing 1; Malmgree- Fig. 2 where MT act as an remote

device, MT is located away from the BS and also capable of controlling or request which antenna to use, sending the signal designating or requesting with antenna is use. The examiner can see that the concept of MT locating close to device 2 of Toru, Drawing 1, measure and sending a similar message to 215, Malmgree Fig. 2, into transmitting device 1 of Toru).

Regarding claim 20, Toru and Malmgree as a whole teach a remote control device transmitting the second designation signal to the reception means for the receiving device (Toru- Drawing 1; Malmgree- Fig. 2 where MT act as an remote device, MT is located away from the BS and also capable of controlling or request which antenna to use, sending the signal designating or requesting which antenna is use. The examiner can see that the concept of MT locating close to device 1 of Toru, Drawing 1, measure and sending a similar message to 215, Malmgree Fig. 2, into transmitting device 2 of Toru).

Response to Arguments

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Conclusion

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL NGUYEN whose telephone number is (571)270-7799. The examiner can normally be reached on M-F 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinsong Hu can be reached on 571 272 3965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL NGUYEN/
Examiner, Art Unit 2617

/Jinsong Hu/
Supervisory Patent Examiner, Art Unit 2617